

Regulation, Competition and Risk in the Market for Credit Cards

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Récemment, des propositions divergeantes sont apparues en ce qui concerne le besoin de réglementer le marché des cartes de crédit au Canada. La Force de Travail sur les Services Financiers du Caucus National Libéral a recommandé l'imposition de plafonds sur les taux d'intérêts sur les cartes de crédit tandis que la Commission MacKay sur les Services Financiers a décrit l'industrie des cartes de crédit comme étant de plus en plus compétitive et n'a pas suggéré de telles réglementations. Étant donné les évidences sur l'offre et la demande de cartes de crédit ainsi que sur les changements dans ce marché, nous concluons que l'imposition de plafonds ne constitue pas une réglementation appropriée.

Contrasting proposals have recently emerged concerning the need to regulate the Canadian credit card market. The National Liberal Caucus Task Force on Financial Services recommended that interest-rate ceilings be imposed on credit cards in Canada, while the MacKay Commission on Financial Services described the credit card industry as being subject to increased competition, and did not recommend any such regulations. Based on evidence provided here on card providers, card consumers, and the changing nature of the credit card market, it is argued that ceilings are not the appropriate regulatory response.

In November 1998 the report of the National Liberal Caucus Task Force on the Future of the Financial Services Sector recommended increased regulation of the credit card industry. In particular, the report recommended that “the government should consider an interest cap mechanism for all credit card accounts for retailers and financial institutions” (p.146). This recommendation follows a similar proposal for credit card interest-rate ceilings put forward in a parliamentary motion signed by more than half of all Members of Parliament (MPs) from all political parties in 1997 (Nankivell 1997). The argument behind these proposals is that credit card interest rates in Canada are too high, that competition is not reducing card rates, and therefore, that interest-rate ceilings should be imposed by regulation in order to ensure that rates are reduced.

The Liberal Caucus view of the credit card industry is very different, however, from the view put forward, almost simultaneously, by the MacKay Commission (The Task Force on the Future of the Canadian Financial Services Sector) in September 1998. This commission, appointed by the minister of finance, made no proposals for increased regulation of this industry. Rather, the MacKay Commission focused on rapid technological developments and increased international competition in the industry (Task Force 1998a, pp. 27, 30). The MacKay report describes the process of new credit card providers “providing new sources of competition to traditional suppliers through the application of technology and new ways of thinking about these products” (ibid., p. 27). An appendix published alongside the commission’s report describes an

increasingly globalized Canadian credit card industry as attracting “aggressive specialized global players” (Task Force 1998*b*, exhibit 5-26).

Given that a majority of MPs in 1997, as well as the Liberal Caucus report of 1998, proposed the imposition of credit card interest-rate ceilings it is clearly important to evaluate the possible impact of this proposed regulation. Yet, even though credit card use is very widespread in Canada, and the impact of regulation of the industry is potentially far reaching, there has, up to now, been no systematic study in the Canadian literature on the possible impact of government regulation on this industry.¹ The aim of this paper is, first, to empirically evaluate the market for credit cards in Canada and, second, to consider the impact that possible regulation could have. The next section provides empirical data from four different types of unsecured consumer credit available to Canadians, while the following sections examine policy implications.

UNSECURED CREDIT IN CANADA

Industry Canada (1995) estimated that in 1994 there were approximately 58 million credit cards of all types in circulation in Canada, of which 27.5 million (47.4 percent) were VISA or MasterCard issued by the banks, 25.5 million (44 percent) were retail cards issued by retailers, and 3.2 million (5.5 percent) were gasoline cards. A major difference between retail cards and bank-issued cards is that Canadian retailers such as the Hudson Bay Company and Eaton’s have charged 28.8 percent interest rates on their cards since 1981. These interest rates have drawn particular attention from proponents of interest-rate ceilings because they are considerably higher and flatter than bank-issued cards. In 1995 the average balance outstanding on retail cards was \$450 which is about one-third the average balance outstanding on bank cards of \$1,500 (Retail Council of Canada 1997). An Angus Reid Survey, conducted for Industry Canada in 1998, estimates that 60 percent of bank cardholders pay off

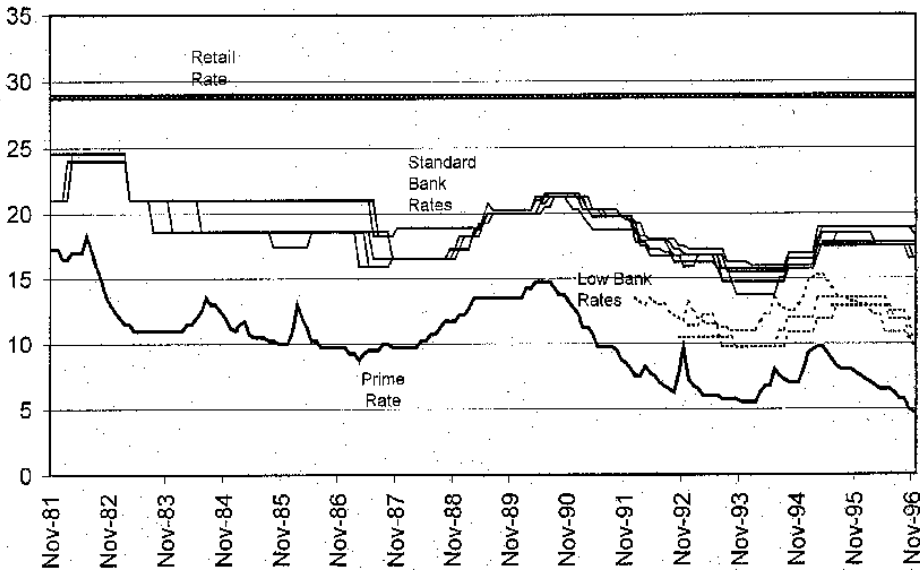
their balances in full while a higher number (76 percent) pay off their higher interest retail card balances in full before paying interest (Industry Canada 1998). Two particular issues which are central to any discussion of consumer credit are the interest rates charged and the degree of consumer risk. These two issues are discussed in more detail below.

Credit Card Interest Rates

Time-series interest-rate data (Figure 1) are available for different types of unsecured consumer credit. These include standard-rate bank cards, low-rate bank cards and retail-issued cards. Personal lines of credit offered by financial institutions are not credit cards as such, but they provide a useful comparison to credit cards because they are also unsecured consumer credit. Specific data on interest rates on unsecured lines of credit are not available, but information from Canadian bank officials indicates that most lines of credit are charged at between 1 and 2 percent above the prime rate. Thus, in Figure 1 the line of credit rate would be displayed slightly above the displayed prime rate.

Figure 1 indicates that there are large differences between the various types of unsecured consumer credit. The most expensive rate is clearly the 28.8 percent rate charged by retail card providers, followed by standard bank-card rates, low bank-card rates and unsecured lines of credit. The standard bank card data (Canadian Bankers Association 1996*a, b*) displayed in Figure 1 are rates on cards provided by the big six banks without any of the additional “co-branding” elements that are sometimes packaged with credit cards (e.g., Air Miles, travel points, etc.). Several important points emerge from the data on standard rate cards. The first is that even though most of these cards charge broadly similar interest rates over time, there are still significant differences in interest rates amongst the different banks. The tendency has been for one bank to unilaterally lower its interest rate and for the other banks to follow. This indicates that there is at least some competitive pressure in this market. The second point is that the time series seems to be

FIGURE 1
Canadian Credit Card Rates



correlated with movements in the cost of funds over time. Scholnick (1998) provides formal evidence using the co-integration methodology that each of these standard credit card rates does indeed form a statistically significant cointegrating relationship with the cost of funds. A significant relationship between prices and marginal costs is usually considered to be consistent with competitive pressures in the market.

The low-rate cards have recently been introduced by many of the Canadian banks, beginning with the Bank of Montreal in 1992. Time-series data on low-rate credit card interest rates from four of the big six banks are shown in Figure 1. These cards have the advantage to consumers of having lower interest rates, but they do charge a small annual fee which ranges in price from \$10 to about \$28. As can be seen from Figure 1, the interest rates on these low-rate cards are significantly lower than interest rates

on the standard-rate cards. Although the time-series data on these low-rate cards are relatively short, it is still possible to note that the interest rates on these cards have tended to fluctuate with the cost of funds. The different banks offering these cards have also offered different interest rates relative to other low-rate cards indicating competitive pressures in this market. In evidence to the House of Commons Industry Committee, Industry Canada cited a 1997 survey indicating that about 60 percent of consumers were aware of these low-rate cards. In an Angus Reid survey conducted for Industry Canada in 1998, the number of respondents who use the low-rate cards was 21 percent (Industry Canada 1998).

The final cards discussed are the retail cards provided by most of the large retail stores in Canada including Zellers, the Bay, Eaton's, and Sears. All of these retailers have charged an interest rate of 28.8 percent since 1981. Thus, these cards have

charged a higher interest rate than any of the bank cards in this period, and secondly, these interest rates have not changed as the cost of funds has changed through time. It is particularly puzzling that retailers have maintained the price of their credit-card debt at a constant level for so long, given that the usual behaviour of retailers such as the Bay and Eaton's is to compete aggressively on price. Data on the profitability of credit card operations are scarce, but when Eaton's, for example, recently applied for protection from its creditors it was revealed that its credit-card division earned \$55 million in 1997, the same year that its retail division lost \$120 million (Davis 1997). It should also be noted that not all Canadian retailers charge the fixed 28.8 percent interest rates on their cards. In 1997 Canadian Tire began to issue a MasterCard card with an interest rate comparable to the standard bank cards, and in 1998 Price Costco began to issue a card at the prime rate plus a fixed amount (Industry Canada 1998).

Risk Premiums

The data in Figure 1 show a very wide dispersion in the price of unsecured credit in Canada at any given time. The risk premium argument — that borrowers of higher risk will be awarded credit at higher interest rates — is often used to explain why different interest rates can occur simultaneously (e.g., Brito and Hartley 1995). Credit card providers are generally reluctant to provide data on indicators of risk, such as screening criteria and delinquency rates, because such data can be used by competitors. However, limited data have been collected in order to evaluate this explanation in the Canadian unsecured credit market.

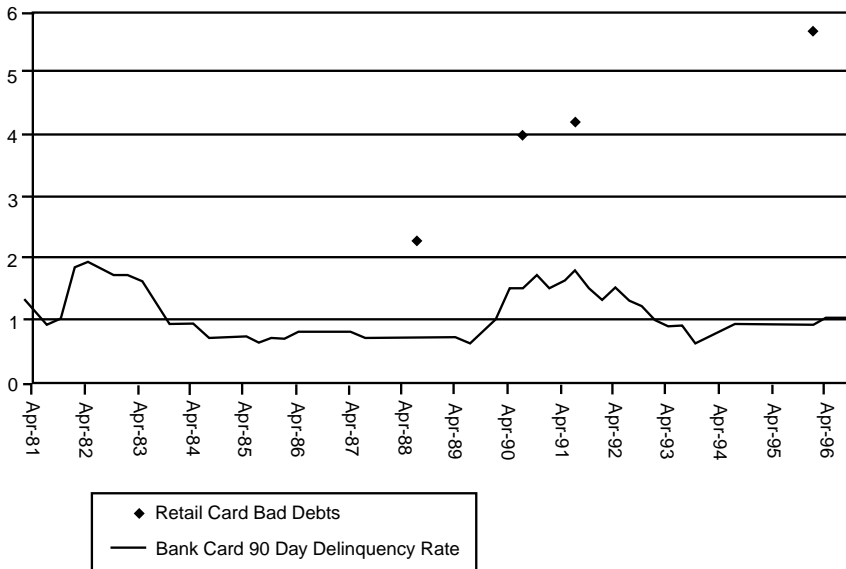
The cheapest form of unsecured credit described above is the line of credit available from banks at rates close to prime. Information from Canadian bank officials indicates that borrowers who are awarded a line of credit at these rates are usually borrowers who have very good credit ratings and usually have extensive dealings with banks, including the holding of mortgages, etc. In other words the cheapest interest rates on unsecured credit are

usually available to the lowest risk borrowers. In terms of bank-issued credit cards, banking officials indicate that the household income required for the cheaper low-rate cards was \$50,000 in 1998, while the household income required for the standard rate cards was only \$35,000 in 1988. While household income is only one element of the screening process, these data are to some extent consistent with lower risk (i.e., higher income) borrowers being charged lower interest rates.

In terms of retail cards, the Retail Council of Canada has argued in written evidence to the House of Commons Industry Committee that “retail credit cards tend to have a relatively higher loss rate than other credit cards” (Retail Council of Canada 1997). Some limited evidence to support this proposition is provided in Figure 2, which provides data on 90-day delinquency rates from all credit cards at all Canadian banks as a percentage of total card loans outstanding (Canadian Bankers Association 1996*b*). Also in Figure 2 are data from the Retail Council of Canada (1997) on retail card bad debts as a percentage of average receivables. There are unfortunately only four data points for this latter series because this data set is not tracked continuously by the Retail Council. These data points were reported to the 1997 House of Commons Industry Committee.

The key conclusion from Figure 2 is that retail card bad debts are significantly higher than bank card 90-day delinquencies for all of the four periods when retail bad debt data are available. This data would seem to be consistent with the proposition of the Retail Council that retail card providers have a higher loss rate than other card borrowers. It is important to bear in mind, however, that “delinquencies” are not the same as “bad debts.” Because of these definitional differences, the data in Figure 2 should be considered suggestive rather than conclusive. Furthermore, it is not being suggested here that the higher bad debts of retail card providers are the only reason for the high retail card rates. It is also possible that other factors such as market structure could provide additional explanations for these rates.

FIGURE 2
Bank Card Delinquency Rates and Retail Card Bad Debts



In general, however, while there are significant problems of data availability, the data that are available do tend to be broadly consistent with the risk premium proposition. As the interest rate associated with an unsecured credit product rises so the risk associated with consumers using that product also tends to rise. While the risk premium argument can provide one possible explanation for why retail card rates are higher than bank card rates (if retail card borrowers are higher risk) it cannot explain other issues relating to the retail card market. These include the questions of why retail card rates have been flat for so long or why consumers continue to borrow on these cards. Given that interest rates in the retail card sector of the market have often been the catalyst for proposals by consumer lobby groups to regulate the industry (Canada. House of Commons 1997), the following section examines this sector in more depth.

THE RETAIL CREDIT CARD MARKET

In order to examine the potential impact of interest-rate ceilings in the retail card market it is useful to examine potential explanations for why different groups of borrowers may be using these cards. Once the motivations of different groups of borrowers have been assessed, it is then possible (in the following section) to examine the impact of the proposed regulation on these different groups.

In evidence to the Industry Committee of the House of Commons (Canada. House of Commons 1997) a representative of the Retail Council of Canada indicated that approximately 90 percent of retail cardholders also hold a bank card. This would seem to indicate that a large proportion of retail cardholders have access to cheaper sources of unsecured credit. It should be noted, however, that this

TABLE 1
Retail Card Repayment Patterns 1994 (Percent by Income)

<i>Household Income</i>	<i>Full Payment</i>	<i>More than Half</i>	<i>Less than Half</i>	<i>Minimum Payments</i>
Less than \$25,000	57	9	12	17
\$25,000 to \$34,999	54	22	9	12
\$35,000 to \$44,999	64	10	9	16
\$45,000 to \$54,999	55	18	13	8
\$55,000 to \$64,999	78	16	2	4
\$65,000 to \$74,999	65	12	12	12
More than \$75,000	73	12	10	4
Total	62	15	10	11

Source: Insight Canada Research quoted in Industry Canada (1995).

90 percent figure is a proportion of retail cardholders rather than retail card borrowers. Industry Canada (1996) suggests that a significant proportion of issued retail cards are not in use. However, even if, for arguments sake, fully half of retail cardholders do not use their cards, this would still imply that borrowers with only retail cards would make up only 20 percent of retail card borrowers.

Additional data on the payment frequencies of Canadian retail card borrowers by income levels are provided in Table 1. An important implication from this data set is that there is no obvious pattern of higher income borrowers paying back their loans to retailers more rapidly than lower income borrowers. For example, 12 percent of borrowers earning as much as \$65,000 to \$74,000, made only the minimum payment on their retail card loans. It should be recalled that a large proportion of borrowers earning over \$35,000 could potentially have access to cheaper bank cards.

Several key questions arise from these data. First, why do consumers borrow on their retail cards? Second, why do they not rapidly pay off these 28.8 percent debts? Third, why does there not seem to be

pressure on retailers to lower their interest rates from the 28.8 percent level? Three possible explanations have been proposed in this context for why some borrowers may borrow on these high-priced cards, but yet not put pressure on retailers to lower rates. Each of these is discussed in turn.

Unexpected Borrowing

Ausubel (1991) has recently attempted to explain why borrowers who have access to cheaper credit (e.g., bank cards), may still use more expensive (retail) cards, and yet not create incentives for these providers to lower interest rates. This argument states that borrowers who have access to cheaper (bank) cards have no intention of using these expensive (retail) cards for borrowing purposes when they initially acquire these cards. Rather the cards provide other benefits, such as discounts, etc. However, on occasion these borrowers *unexpectedly* have to borrow on their high priced (retail) cards, when consumption exceeds income and after reaching their credit limits on their cheaper sources of credit (e.g., bank cards). Because such retail card users do not initially plan to borrow on these cards, the interest rate on the card does not determine whether this group of consumers initially acquires the cards.

Ausubel argues that “these customers are unlikely to be responsive to any interest rate cut by a (provider) as they do not intend to borrow at the outset” (*ibid.*, p.70). This model assumes that much of the borrowing on credit cards is in response to unexpected shocks, an assumption that is ultimately an empirical question.

The Ausubel (1991) argument that borrowers with cheaper sources of credit will be unresponsive to interest rates could be an explanation for why retail card providers do not seem to have faced pressure to lower their interest rates. Furthermore, it is possible to argue that unexpected shocks to consumption or income can occur to borrowers of all incomes, thus forcing them to unexpectedly use retail card debt. This could be an explanation for the data in Table 1, which show that a proportion of borrowers with a household income over \$35,000 (who could be eligible for cheaper bank cards) continue to make use of the 28.8 percent retail card debt.

Borrowers without Cheaper Alternatives

A second group of retail card borrowers are those who do not have access to cheaper sources of credit because they are higher risk borrowers, and are thus forced to use the more expensive retail cards. In the Canadian retail card context, this group will be relatively small, given that only 10 percent of retail cardholders do not have access to cheaper bank-issued cards. In terms of explaining why credit card rates may be flat, Ausubel (1991) has proposed a second possible explanation, based on this group of borrowers. He contends that higher risk borrowers will be very interest-rate sensitive when selecting a high priced (retail) card, precisely because they do not have access to cheaper credit (such as bank cards). They will thus be much more likely to actively search for a card with a lower interest rate. However, because these are higher risk borrowers, Ausubel argues that they will “borrow large sums but often default.” Because of adverse selection he argues that “(providers) will be hesitant to compete in the interest rate dimension, as a lower price on credit will disproportionately draw the class of consumers who plan to utilize their credit” (1991, p.70).

Borrowers with Cheaper Alternatives

Consumer lobby groups (Canada. House of Commons 1997) have proposed a third possible explanation for borrowing on retail cards. They claim that some borrowers who do have cheaper alternatives available may still continue to use retail cards. Essentially, this argument assumes behaviour that is less than optimizing on the part of consumers because they “choose” to borrow using higher priced retail card credit, even though they may have cheaper bank credit available. These lobby groups claim, for example, that some borrowers may not be aware of the high interest rates that they are paying on retail cards. A related argument could be made that some borrowers use retail cards to make purchases (because of the price discounts, etc.), but that they do not pay off or switch these balances before they begin to pay interest. The puzzle is why these borrowers do not switch these balances to their bank cards, given the significant interest-rate differentials between the cards displayed in Figure 1. Evidence is not available to determine how many (if any) borrowers might fall into this category. Based on these arguments, however, consumer lobby groups have called for interest-rate ceilings in an attempt to lower the interest rate paid by these borrowers.

The following section examines how interest-rate ceilings might affect these different types of borrowers. It first provides some data on the actual impact of ceilings on other consumer credit markets, and then examines the potential impact of ceilings on different sectors and on different types of borrowers in the Canadian credit card market.

INTEREST RATE CEILINGS: A POLICY ASSESSMENT

The Impact of Ceilings in other Consumer Credit Markets

Canner and Fergus (1987) report on a 1979 study, which examined credit card use in the United States, where some states have in the past imposed credit-card ceilings while others have not. The study

examines four different states, with only one of them, Arkansas, having particularly low and binding credit-card ceilings. The conclusions of the study were that lower income families in Arkansas were significantly less likely to hold credit cards than families of similar incomes in the other states.² However, higher income families in all the states, including Arkansas, were equally likely to hold credit cards. Thus, the conclusion of this study is that the imposition of lower credit-card ceilings will result in credit card providers being less willing to provide higher risk (or lower income) borrowers with credit cards.

It is also useful to examine the long history of interest-rate ceilings in consumer credit markets in Canada. Neufeld (1972) provides a detailed description of the history of interest-rate ceilings. In 1871 a 7 percent interest-rate ceiling on bank loans was incorporated into the *Bank Act*. However, in 1913 the Privy Council ruled that borrowers could “voluntarily” pay more than 7 percent. Thereafter, as Neufeld comments “by the simple expedient of deducting interest in advance, the banks could continue to charge any rate they wished” (1972, p. 550). Up-front interest could be expressed as a percentage of the average balance outstanding, which could not be less than 50 percent of the initial principle. Thus a stated rate of 7 percent could in the extreme case become an effective rate of 14 percent. Eventually, following the *Bank Act of 1967*, the “ceiling was entirely removed” (ibid.). The implication to draw from this is that the imposition of ceilings can lead to the creation of costly mechanisms aimed at circumventing the intentions of regulators.³

Ceilings in the Bank Card Sector

Given the evidence provided here, the Canadian bank credit card market does not appear to be a market that can benefit from the regulatory imposition of interest-rate ceilings. This sector of the card market has a very wide range of interest rates currently on offer and has no barriers to entry from aggressive foreign competition. In essence the kind

of market failure that is usually a prerequisite for regulatory intervention does not seem to be evident here. The data above describe the bank card sector as an industry with a wide variety of types of unsecured credit — standard cards, low cards, and lines of credit — as well as a variety of interest rates charged both between, as well as within, each of these types of credit. Furthermore, the data show that these interest rates are strongly related to the cost of funds faced by the banks. Some data are also available which are consistent with the proposition that the higher the risk of a borrower the higher the interest rate charged.

Furthermore, the bank card market is not static, but is changing rapidly in response to two forces highlighted by the Mackay Commission — technological change and international competition. Clearly, these two forces will weaken even further any case for interest-rate ceilings in the bank card sector of the market. With regard to international competition, for example, recent data from the research firm BAIGlobal Inc. indicates the extent to which foreign firms have begun to enter the Canadian Market (Craig 1999). These data show that only one year after entering the Canadian market, two US credit card companies, MBNA and Capital One, already account for 6 percent of the market share of the bank card market in 1998 in Canada.⁴ These foreign entrants into the Canadian market are also driving some of the technological innovation in the industry. As noted by the MacKay Commission, some of the US companies now offer many thousands of different cards to different consumer segments (Task Force 1998a, p. 27). Changes such as these will serve to increase even further the competitiveness of the bank card sector.

Ceilings in the Retail Card Sector

The key issue in the retail card sector concerns whether or not any regulatory response is required by the high and flat interest rates charged on these cards. The Liberal Caucus report recommended interest-rate ceilings, while the MacKay Commission

did not propose any such regulatory changes. The main argument against the imposition of ceilings is that this increased regulation will serve to discourage potential new entrants into the market. Furthermore, as the US case study above indicates, while ceilings may lower the interest paid by some borrowers, it is also possible that other borrowers may be denied credit if binding ceilings are imposed.

Current developments in the retail card sector tend to indicate that a policy of encouragement of new entrants into this sector may be beneficial to consumers. Recently, some Canadian retailers, such as Canadian Tire, have begun to charge cheaper card rates, and stores such as Price Costco now charge flexible rates that are tied to the prime rate. Furthermore, the argument can also be proposed that the technological changes and globalization in the consumer credit industry may increase competition in this sector of the market. While data are not currently available on this point, a banking analyst has recently commented to *The Globe and Mail* that “the U.S. card companies are taking market share, but I think they are taking a lot of market share out of the retailers who have 28-per-cent interest rate cards out there” (Craig 1999).

The decision on whether or not to impose ceilings should also be considered in the context of the possible groups of retail card users, as discussed earlier. The first group of borrowers discussed above (Ausubel 1991), are those who have access to cheaper bank cards, who do not plan to use retail card credit, but find themselves unexpectedly having to do so. What would be desirable in this situation, from a regulatory standpoint, is the creation of more sophisticated consumer credit markets, where additional credit could be provided rapidly, cheaply, and efficiently, at interest rates that reflect the risk associated with a particular borrower. If there were alternative forms of credit available, then borrowers who unexpectedly require credit would not be forced to use their expensive retail cards. If the desired goal is the encouragement of more efficient consumer credit markets, then the regulatory envi-

ronment should reflect this. Imposing interest-rate ceilings will only serve to retard the creation of more efficient and sophisticated consumer credit markets.

The second group of retail card borrowers are those (approximately 10 percent of retail cardholders) who do not have access to cheaper bank cards and thus require retail cards for borrowing purposes. If the high retail card rates reflect the risk premium associated with higher risk borrowers, then it can be argued that an interest-rate ceiling will not benefit these borrowers. If ceilings are imposed, in this context, then card suppliers will have an incentive to increase their screening requirements, with the result that higher risk borrowers may lose access to credit. It is also possible that the high retail card rates reflect monopoly profits over and above a risk premium, and that the introduction of a ceiling may not necessarily lead to the reduction of credit to these higher risk borrowers, because it is still profitable to lend to them. On balance, however, it is argued here that the costs associated with imposing a ceiling, discussed above, exceed the possible benefits to the relatively small group of borrowers who would not lose their credit and also pay lower rates if a ceiling were introduced.

The third group of borrowers are those who are described by consumer lobby groups as using expensive retail card debt even though they do have access to cheaper forms of credit. If credit-card ceilings are imposed, then these borrowers could possibly pay lower interest rates. However, it can be argued that the appropriate regulatory response for this group of borrowers lies in the realm of greater clarity of information to consumers on the interest rates that they are paying. Once again, the possible benefits to this group of borrowers from interest-rate ceilings do not seem adequate compensation for the potential costs of ceilings imposed on the other groups of borrowers described above. Indeed, it is interesting to note that after many attempts in the US Congress to impose regulatory interest-rate ceilings on US credit cards, the only regulatory changes

that have actually been instituted are those relating to the prominent and clear disclosure of the interest rate payable by consumers (Ausubel 1991).

CONCLUSION

This paper discusses the recent proposal in the Liberal Caucus Report on Financial Services to impose credit card interest-rate ceilings. The evidence provided here describes the bank card sector of the market as having a wide variety of products available to consumers at many different interest rates. Increased technological developments and increased entry into the market by foreign providers will further increase the choices available to consumers. Thus, the market failure that is usually a prerequisite for the imposition of ceilings does not seem to be evident in this sector.

In the retail card sector the evidence and analysis provided here supports the view that ceilings are not an appropriate regulatory response to high and flat interest rates; a view that is consistent with the findings of the MacKay Commission. The regulatory aim should be to encourage rather than discourage increased efficiency and sophistication in the Canadian consumer credit market.

NOTES

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¹See DeMuth (1986); Canner and Fergus (1987); Canner and Luckett (1992); US General Accounting Office

(1994); and Meyercord (1994) for discussions of US proposals to impose credit-card ceilings.

²In 1978, the US Supreme Court effectively halted the ability of individual states to impose card ceilings.

³I am grateful to an external referee for bringing these historical issues to my attention.

⁴Merrill Lynch recently lowered its earnings forecast for the Bank of Montreal because of increased competition from these new entrants into this market. (See Craig 1999.)

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